

125 wherein each of said at least two end portions contains at

126 least one segment of at least one of the lumens (2, 3) and has at least one

127 channel (7, 8) for delivering and/or sampling the fluid.

REMARKS

Favorable reconsideration of the present application is respectfully requested.

The catheter of the present invention is of a type that is designed to include at least two separate conduits (or lumens or channels) for transporting fluid. The lumens are isolated from each other along their entire length by a wall, so that each lumen can simultaneously perform different fluid transport functions, for example, perfusion or injection in one lumen and extraction or drainage in the other.

In this respect, it is to be noted that devices having two separate conduits have previously been developed, an example being disclosed in U.S. Patent No. 5,776,111 to Tesio, cited on the PTO-892 accompanying the Official Action. Such devices, however, are, in reality, two different catheters which may be fixed in position in relation to one another at a given point by, for example, a stabilization disc. This type of double catheter has the drawback of being difficult to insert and maintain the desired positions of the distal ends of the catheters.

The present invention overcomes this drawback by providing two lumens isolated from each other along their entire lengths by a wall, in a single catheter construction, which facilitates insertion of the catheter. The

positions of the openings at the distal ends of the lumens may be varied to a degree due to the fact that the lumens are physically separated beginning at a fixed dividing point that is nearer the distal end than the proximal end.

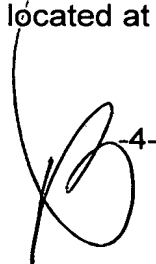
Typically, the catheter will be constructed having a dividing point at about 1-6 mm from the distal end of the lumens.

In the February 4, 1999, Official Action, Claims 1-3 were rejected under 35 USC §102(b) as being clearly anticipated by U.S. Patent No. 4,925,452, to Melinyshyn. Applicant submits that the changes made in Claim 1 herein obviate this ground of rejection and render Claims 1-3 patentable.

Specifically, Claim 1 has been amended to recite that the at least two lumens in the multilumen catheter are isolated from one another along the entire length of the catheter so as to define two separate fluid flow passages. In contrast, the Melinyshyn patent discloses a drainage catheter having multiple conduits, but the catheter includes a manifold 34 and a common drainage conduit portion 36 leading away from the manifold.

Because this catheter was designed for drainage only, the separate conduits feed the fluid being drained into a common collection point in the catheter. Thus, the fluid flow passages are of Melinyshyn not isolated along the entire length of the catheter, and do not define completely separate fluid flow passages. As a result, Claims 1-3 are not anticipated by Melinyshyn.

Claim 1 has also been amended to recite that the previously-recited "dividing point (12) located at a predetermined distance D1 from said

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proximal end" of the catheter, is located at a fixed predetermined distance, and that the dividing point is nearer to the distal end of the catheter than to the proximal end. While Applicant believes that Melinyshyn did not meet the previously recited limitation that the dividing point be located at a predetermined distance, Applicant has attempted to clarify that the dividing point is at a fixed position on each catheter. In contrast, Melinyshyn is particularly directed to a catheter especially designed with membranes joining the conduits to allow the conduit sections to be separated to any point along their length. The Melinyshyn device does not have a dividing point located at a fixed predetermined distance from the proximal end of the catheter, and thus does not anticipate Claim 1 on this basis, either.

Further, although there is no outstanding rejection under 35 USC §103(a) based on alleged obviousness, it is noted that it would not have been obvious to modify the Melinyshyn device to provide the features discussed above, as those modifications would eviscerate the very advantages that Melinyshyn seeks to provide, namely having a common drain catheter that may drain from more than one location, and that allows a great degree of latitude in configuring the catheter, for example, being able to maintain the conduit ends joined together, or having the conduit ends separated and spaced apart only a short distance, or separated along all or a substantial portion of their lengths.

In view of the foregoing, Applicant believes that Claims 1-3 as now presented are allowable over the cited prior art. Reconsideration and withdrawal of the rejection of these claims under 35 USC §102(b) is therefore

respectfully requested. Passage of the application to issue at an early date is earnestly solicited.

The Examiner is encouraged to call the undersigned to discuss and to attempt to resolve any issue that may remain in this application.

Respectfully submitted,

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